Exemption No. 10079

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20591

In the matter of the petition of

GENERAL ELECTRIC COMPANY

for an exemption from §§ 21.151 and 21.153 of Title 14, Code of Federal Regulations

Regulatory Docket No. FAA-2009-0772

GRANT OF EXEMPTION

Mr. Dana Lakeman, Regulatory Compliance Leader, GE Aviation, General Electric Company (GE), One Neumann Way, MD N-149, Cincinnati, Ohio 45215, petitioned the Federal Aviation Administration (FAA) on behalf of GE by letter and supplemental information dated August 19, 2009 and December 15, 2009, respectively. The petition requested an exemption from §§ 21.151 and 21.153 of Title 14, Code of Federal Regulations (14 CFR). The exemption, if granted, would allow amendments to GE's production limitation record (PLR) to permit the manufacture and installation of certain parts which are not part of the type certificated products listed on GE's PLR.

The petitioner requests relief from the following regulations:

Section 21.151 prescribes that a production limitation record is issued as part of a production certificate. The record lists the type certificate of every product that the applicant is authorized to manufacture under the terms of the production certificate.

Section 21.153 prescribes that the holder of a production certificate desiring to amend it to add a type certificate or model, or both, must apply therefor [sic] in a form and manner

prescribed by the Administrator. The applicant must comply with the applicable requirements of §§ 21.139, 21.143, and 21.147.

The petitioner supports its request with the following information:

GE holds multiple engine type certificates (TCs) and production certificate (PC) No. 108 since 1961. Some of GE's customers (such as airframe manufacturers and airlines) seek delivery of their engines as a "complete propulsion system" consisting of a complete certificated engine and aircraft kits/parts associated with a type-certificated aircraft. This external engine hardware, including single articles or kits (hereafter, "interface components" [IC]) is to be pre-installed at GE's manufacturing facility. Delivering a complete propulsion system meets GE customer requirements and would make engine production more efficient and enable airline customers to accomplish faster engine changes.

The IC that GE cites are components of aircraft certificated under the airworthiness standards found in Parts 23, 25, 27, or 29. The design data for the components is not held by GE. GE only holds TCs for aircraft engines. GE states it is safer to deliver engines to airframe manufacturers with the IC already installed. This prevents redundant disassembly, torque breaks, handling damage, and additional retesting after the engine ships from the GE manufacturing facility. Further, GE personnel will install the IC, rather than parties outside of the manufacturer's control.

GE asserts that some FAA offices, along with GE and other FAA production approval holders, have interpreted the regulations to allow production and installation of the IC under GE's PC without an exemption. GE has invested resources to change its approved quality systems and arranged business commitments to deliver its product with the IC installed. However, a October 3, 2008 FAA policy memo, "Clarification regarding licensing agreement entries on a Production Certificate/Production Limitation Record" contains an interpretation of the regulations that conflicts with GE's interpretation. In an effort to continue this practice, GE is pursuing an exemption from the FAA by offering several conditions under which it would operate.

GE backs its request for exemption with statutory and regulatory language. It cites 14 CFR 21.133, interpreting that section as lacking any prohibition for the requested relief. It notes that Part 21 and its preamble do not contain language prohibiting the manufacture of less than complete products. GE states that a narrow FAA interpretation of §§ 21.151 and 21.153 conflicts with other provisions of Part 21. Finally, it cites previous FAA actions that are consistent with the intent of GE's petition.

In GE's petition, it reviews several options specified in the 2008 FAA policy memo. GE explains why each option is not viable; they assert that two of the proposed options will cost manufacturers millions of dollars in certification costs. They also state that the options will duplicate costs incurred by type certificate holders and result in additional costs to airlines. Additionally, GE notes that manufacturing these parts under Parts Manufacturer Approval

(PMA) is not a viable option for GE, as the option does not address the installation of the IC. GE also states that manufacturing the IC as a supplier is impractical, costly, and would result in redundant oversight and burdens for GE and its customers.

GE asserts that its proposal will improve safety. GE also states that granting its request will remove opportunities for human factor and manufacturing errors that are inherent to installation of IC after manufacture.

On December 15, 2009, GE supplemented its petition with a response to a question from the FAA Production and Airworthiness Division. The supplement clarified that GE also seeks relief for manufacture of IC that ship separately from the GE engines.

A summary of the petition was published in the Federal Register on September 4, 2009 (74FR 45899). The FAA received no comments.

The FAA's analysis/summary is as follows:

The FAA has reviewed GE's petition for exemption and we find a grant of exemption would provide an equivalent level of safety to that of the regulations and would be in the public interest. The following is a summary of our analysis of GE's petition.

The FAA has found that for a PC holder to be allowed to manufacture a product, it must hold for the product concerned, a current TC, rights to the benefits of a TC under a licensing agreement, or an STC, as specified in § 21.133. The FAA has determined "the rights to the benefits of a type certificate under license" consists of all appropriate data that comprises the entire type design for the complete TC product (reference the previously cited October 3, 2008 Policy Memo). The plain language of the regulation does not support licensing of portions of an existing type design to a production approval holder. Further, FAA regulations and policy have not supported manufacturers of part 33 products being licensed portions of a part 23, 25, 27, or 29 product for manufacture and installation on a part 33 product.

The FAA agrees with GE that the relief sought will not compromise safety. GE's customers will no longer need to partially disassemble the GE engine to install the IC, thereby decreasing the potential of installation errors. End users of GE products, such as airlines and charter operators, will be able to streamline operations with more rapid engine changes due to reductions in installation complexity. GE's manufacturing process will incorporate new parts production and installation activities which could benefit that manufacturing sector. The FAA also agrees that potential industry benefits may be realized from streamlining manufacturing and eliminating duplicative processes which may ultimately reduce certification expenses.

The FAA finds that IC can be installed during production without adversely affecting safety provided the conditions and limitations of this exemption are met. The manufacturing process and configuration of the IC installation must be documented and approved in a manner

acceptable to the FAA. This relief is consistent with the agency's efforts to refine and develop its regulations and explore processes that realize efficiencies and reduce risk.

The FAA's Decision:

In consideration of the foregoing, I find that a grant of exemption provides an equivalent level of safety and is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701, delegated to me by the Administrator, General Electric Company (GE) is granted an exemption from 14 CFR §§ 21.151 and 21.153 to the extent necessary to allow GE to apply to the FAA to amend its production limitation record to allow the manufacture and installation of interface components described in FAA type certificates held by an entity other than GE.

Conditions and Limitations

1. GE may manufacture interface components (IC, which includes single articles or kits) that are part of a product type certificated under Parts 23, 25, 27 and 29, and install those components during production on GE engines under GE's production certificate PC108. The design data for the IC must be licensed to GE and the IC to be installed must be identified on the GE PLR.

2. IC added to the GE PLR is limited to airframe components specified in condition No. 1. The relief provided by this exemption is limited to the manufacture of IC that is to be installed on GE engines during engine production. IC manufactured and installed under the provisions of this exemption may only leave the GE quality system assembled to the engine. IC manufactured by GE under the relief granted in this exemption may not be shipped as spare parts or in any other format.

3. To exercise the privileges of this exemption, GE must apply to the manager of its FAA managing office using FAA Form 8110-12, Application for Type Certificate, Production Certificate, or Supplemental Type Certificate, requesting amendment of GE's PLR for the manufacture and installation of IC. The data licensed to GE must be a complete data package and include design and installation drawings. That data must be made available to GE and the FAA upon request.

4. IC listed on GE's PLR is limited to IC manufactured by GE for installation on an engine being manufactured under GE's production certificate. The design data must be licensed from the holder of a U.S. type certificate (including an FAA-validated type certificate) for the aircraft on which the GE engine is to be installed.

5. The application by GE to its FAA managing office to amend its PLR must contain the following information:

a. A comprehensive description of the scope of the proposed manufacturing and installation activity for the IC on each affected engine model under the provisions of this exemption.
b. A specific description of the IC to be installed on each affected GE engine model, including the part number. Kits combining IC should define the individual IC included in the kit.
c. The licensing agreement between GE and the holder of the type certificate that specifically identifies the IC to be installed.
d. A description of the documentation to be maintained by GE identifying the IC by its associated type certificate, GE's supplier of the IC (if applicable), and the GE product on which the IC is installed.

6. The holder of type design data identifying the IC installed on the GE product under this exemption retains all the continuing airworthiness responsibilities for the IC. GE is responsible for all issues related to quality, manufacturing and installation of the IC by GE. The GE quality manual must include a description of how those responsibilities will be separated, identified, and fulfilled by GE and the holder of the type certificate identifying the IC.

7. When exercising the privileges of this exemption, the IC may only be installed under the provisions of GE's production certificate.

8. GE must have procedures and processes in place to ensure the engine, notwithstanding the installed IC, conforms to its approved type design, the IC conforms to its approved type design data, and the GE product with the installed IC is in a condition for safe operation.

9. Prior to manufacturing and installing IC on an engine under the provisions of this exemption, GE must receive confirmation from its FAA certificate managing office that the FAA Transport Airplane Directorate and the FAA Engine and Propeller Directorate have determined that any component GE intends to manufacture and install under the provisions of this exemption is an interface component (IC) and that installing the IC during engine manufacture provides a level of safety that is greater than can be achieved by installation of the IC after engine manufacture.

10. GE must amend its quality manual to indicate that any FAA airworthiness approval documentation issued for an engine containing IC manufactured and installed under the provisions of this exemption must specify that the IC was installed on the product under a licensing agreement.

This exemption terminates on June 30, 2012, unless sooner rescinded or superseded.

Issued in Washington, DC, on June 15, 2010.

/s/
Kalene C. Yanamura
Acting Director, Aircraft Certification Service